

[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2018-0449; Product Identifier 2018-NM-042-AD; Amendment 39-

19452; AD 2018-20-18]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., Airplanes

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model DHC-8-400 series airplanes. This AD was prompted by a report of uncommanded deployment of the ground spoilers when the power levers were advanced for takeoff, which was caused by faulty switches in the power lever module. This AD requires revising the maintenance or inspection program, as applicable. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5,

Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet http://www.bombardier.com. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at http://www.regulations.gov by

### **Examining the AD Docket**

searching for and locating Docket No. FAA-2018-0449.

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0449; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** John P. DeLuca, Aerospace Engineer, Avionics and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7369; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

### **SUPPLEMENTARY INFORMATION:**

# **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc., Model DHC-8-400 series airplanes. The NPRM published in the <u>Federal Register</u> on May 25, 2108 (83 FR 24248).

The NPRM was prompted by a report of uncommanded deployment of the ground spoilers when the power levers were advanced for takeoff, which was caused by faulty switches in the power lever module. The NPRM proposed to require revising the maintenance or inspection program, as applicable.

We are issuing this AD to address faulty switches in the power lever module, which could result in uncommanded deployment of the ground spoilers and a possible runway excursion.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2017-35, dated November 29, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for certain Bombardier, Inc., Model DHC-8-400 series airplanes. The MCAI states:

There has been an incident of uncommanded deployment of the ground spoilers when the power levers were advanced for take-off. The warning horn sounded and the pilot rejected the take-off. The subsequent investigation determined the root cause of the spoiler deployment was faulty switches in the power lever module. An uncommanded deployment of the ground spoilers may lead to a runway excursion.

This [Canadian] AD mandates the incorporation of a new Certification Maintenance Requirement (CMR) task to check the ground spoiler switches in the power lever module.

Required actions include revising the maintenance or inspection program, as applicable. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0449.

#### **Comments**

We gave the public the opportunity to participate in developing this final rule. The following presents the comment received on the NPRM and the FAA's response.

### **Request to Revise Requirements Related to Temporary Revision (TR)**

Horizon Air requested that paragraph (g) of the proposed AD be revised to refer to Bombardier Certification Maintenance Requirements (CMR) Task 276000-110 of Q400 Dash 8 (Bombardier) TR ALI-0185, dated March 19, 2018. Horizon Air noted that TR ALI-0185, replaced TR ALI-0173, dated March 14, 2017, which was specified in the proposed AD.

Horizon Air also requested that we include a statement that, "When this temporary revision has been included in general revisions of the PSM [product support manual], the general revisions may be inserted in the maintenance or inspection program, as applicable, provided the relevant information in the general revision is identical to that in [Q400 Dash 8] (Bombardier) TR ALI-0185 [, dated March 19, 2018]."

We agree to clarify. Paragraph (g) of this AD requires operators to incorporate "the information specified in" CMR Task 276000-110 of Q400 Dash 8 (Bombardier) TR ALI-0173, dated March 14, 2017. Task 27600-110 is the same in both TR ALI-0173, dated March 14, 2017; and TR ALI-0185, dated March 19, 2018. Therefore, if operators incorporate TR ALI-0185, dated March 19, 2018, into the maintenance or inspection program, as applicable, they are in compliance with paragraph (g) of this AD (i.e., since the information specified in TR ALI-0185, dated March 19, 2018, contains the same information as TR ALI-0173, dated March 14, 2017, by incorporating TR ALI-0185, dated March 19, 2018, the operator is complying with the requirement to incorporate the information specified in TR ALI-0173, dated March 14, 2017). Similarly, if operators incorporate the PSM into the maintenance or inspection program, as applicable, they are

in compliance with paragraph (g) of this AD. We have not changed this AD in this regard.

### Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

### Related Service Information under 1 CFR part 51

Bombardier has issued Q400 Dash 8 (Bombardier) Temporary Revision

ALI-0173, dated March 14, 2017. This service information describes CMR Task

276000-110, "Operational Check of the Ground Spoiler Switches in the Power Lever

Module." This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Costs of Compliance**

We estimate that this AD affects 86 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

We have determined that revising the maintenance or inspection program takes an average of 90 work-hours per operator, although we recognize that this number may vary from operator to operator. In the past, we have estimated that this action takes 1 work-hour per airplane. Since operators incorporate maintenance or inspection program

changes for their affected fleet(s), we have determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, we estimate the total cost per operator to be \$7,650 (90 work-hours x \$85 per work-hour).

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

# **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the

national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
  - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

# List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

# **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2018-20-18 Bombardier, Inc.:** Amendment 39-19452; Docket No. FAA-2018-0449; Product Identifier 2018-NM-042-AD.

### (a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### (b) Affected ADs

None.

# (c) Applicability

This AD applies to Bombardier, Inc., Model DHC-8-400, -401, and -402 airplanes, certificated in any category, serial numbers 4001 and subsequent.

# (d) Subject

Air Transport Association (ATA) of America Code 27, Flight controls.

#### (e) Reason

This AD was prompted by a report of uncommanded deployment of the ground spoilers when the power levers were advanced for takeoff, which was caused by faulty switches in the power lever module. We are issuing this AD to address faulty switches in the power lever module, which could result in uncommanded deployment of the ground spoilers and a possible runway excursion.

# (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

## (g) Revision of Maintenance or Inspection Program

Within 30 days after the effective date of this AD: Revise the maintenance or inspection program, as applicable, to incorporate the information specified in Certification Maintenance Requirements (CMR) Task 276000-110 of Q400 Dash 8 (Bombardier) Temporary Revision ALI-0173, dated March 14, 2017.

# (h) Initial Compliance Time

The initial compliance time for doing the CMR Task 276000-110 specified in paragraph (g) of this AD is within 8,000 flight hours after the effective date of this AD.

#### (i) No Alternative Actions or Intervals

After the maintenance or inspection program has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (j)(1) of this AD.

# (j) Other FAA AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.
- (2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

### (k) Related Information

- (1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2017-35, dated November 29, 2017, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0449.
- (2) For more information about this AD, contact John P. DeLuca, Aerospace Engineer, Avionics and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7369; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

## (1) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.
- (i) Q400 Dash 8 (Bombardier) Temporary Revision ALI-0173, dated March 14, 2017.
  - (ii) Reserved.
- (3) For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet http://www.bombardier.com.
- (4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Des Moines, Washington, on September 20, 2018.

John P. Piccola, Acting Director, System Oversight Division, Aircraft Certification Service.

[FR Doc. 2018-22144 Filed: 10/15/2018 8:45 am; Publication Date: 10/16/2018]